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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,477	09/29/2000	Renke Bienert	764-00897	3399

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EXAMINER	
NGUYEN, TU X	
ART UNIT	**PAPER NUMBER**
2684	

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/582,477	BIENERT ET AL.	
	Examiner	Art Unit	
	Tu X Nguyen	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2005* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☒ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Amendment

1. Applicant's arguments, filed 2/02/05 with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3, 8, 10-12 and 15-19, are rejected under 35 U.S.C. 103(a) as being unpatentable over McNair et al. (US Patent 5,595,342) in view of Nakajima et al. (US Patent 5,487,083).

Regarding claim 1, McNair et al. disclose a management system for a building or for one or more rooms in a building (see col.5 lines 1-40), having at least one control center and at least two components connected to the control center by radio, the control center receiving signals from the components or transmitting signals to the components (see fig.14 and col.7 lines 40-60).

McNair et al. fail to disclose the signals being transmitted within a prescribed range (54), wherein the signals are transmitted at least two different frequencies within the frequency range (54), at least one of these frequencies being outside the partial frequency range (55) of the frequency range (54), is defined as including a protion of the

frequency range (54) that is more commonly used than other portions of the frequency range (54) by devices in or near the building.

Nakjima et al. disclose the signals being transmitted within a prescribed range (54), wherein the signals are transmitted at least two different frequencies within the frequency range (54), at least one of these frequencies being outside the partial frequency range (55) of the frequency range (54), is defined as including a protion of the frequency range (54) that is more commonly used than other portions of the frequency range (54) by devices in or near the building (see fig.2,3 and col.3 lines 44-66). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of McNair with the above teaching of Nakjima in order to provide common frequency and other frequencies to meet the high demand traffic in a specific area, in this case, the radio zone 2b corresponding to in or near the building.

Regarding claim 2, the modified McNair et al. disclose the signals are transmitted in a temporally offset fashion at at least two different frequencies (see Nakajima, col.6 lines 10-14).

Regarding claim 3, the modified McNair et al. disclose the signals are transmitted sequentially in time at three different frequencies, at least a first of the three frequencies being below the partial frequency range, and at least a second of the three frequencies being above the partial frequency range (see McNair, fig.2).

Regarding claim 8, the modified McNair et al. disclose the control center (McNair, 110, fig.8) and the components (McNair, 120, 123, 125 fig.8) have at least in each case

one transmitter transmits each of these signals to be transmitted at at least two two different frequencies, each of these frequencies being assigned to a different channel within the frequency range (see Nakakima et al., fig.2,3).

Regarding claim 10, the modified McNair et al. disclose the partial frequency range is in a range, frequently used by by foreign units, at about the band center frequency of the frequency range (see fig.2, f2 partial center frequency of f1).

Regarding claims 11 and 15, McNair et al. disclose sending at least selected data using a first frequency (see col.3 lines 22-23); sending at least selected data using a second frequency (see fig.2,3 and col.3 lines 44-66). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of McNair with the above teaching of Nakjima in order to provide common frequency and other frequencies to meet the high demand traffic in a specific area.

McNair et al. fail to disclose identifying a desired frequency range within which communication is to occur and a subrange in the frequency range which is more commonly used than other parts of the frequency range.

Nakajima et al. disclose identifying a desired frequency range within which communication is to occur and a subrange in the frequency range which is more commonly used than other parts of the frequency range (see fig. 2,3 and col.

sending at least selected data using a first frequency in the subrange (see McNair, col.3 lines 7-24); and

Sending a least selected data using a second frequency that is not in the subrange (see McNair, col.3 lines 7-24).

Regarding claim 12, the modified McNair et al. disclose the step of sending a set of data is performed using a wireless transmission (see McNair, col.2 lines 12-24).

Regarding claims 16 and 18, the modified McNair et al. disclose a number of the wireless components are devices for monitoring environment conditions within an area of the building (see McNair, col.2 lines 9-20).

Regarding claim 17, the modified McNair et al. disclose the step of identifying the subrange includes determining what other wireless devices there are in the vicinity (see Nakajima, col.5 lines 22-29) of the building.

Regarding claim 19, the modified McNair et al. disclose wirelessly sending at least selected data using a third frequency that is also not in the subrange, wherein the second frequency is below the subrange (see Nakajima, f1,f2,2h2a), and the third frequency is above the subrange (see Nakajima, f2,f3,2c,2e).

4. Claims 4-5, 13-14 and 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over McNair et al., in view of Nakajima et al. (US Patent 5,487,083) and further in view of Bartel et al. (US Patent 5,898,230).

Regarding claims 4-5, 13 and 20, the modified McNair et al. fail to disclose the frequency range in particular an ISM band, wherein the frequency range is between 433 MHZ and 434.79 MHZ.

Bartel et al. disclose the frequency range in particular an ISM band, wherein the frequency range is between 433 MHZ and 434.79 MHZ (see abstract). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified McNair et al. with the above teaching of

Bartel et al. in order to provide communication to be carried out in both a long distance and a close communication mode and where a variety of different signals are used.

Regarding claim 14, the modified McNair et al. disclose wirelessly sending at least selected data using a third frequency that is also not in the subrange, wherein the second frequency is below the subrange (see Nakajima, f1,f2,2h2a), and the third frequency is above the subrange (see Nakajima, f2,f3,2c,2e).

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over McNair et al. (US Patent 5,595,342) in view of Nakajima et al. (US Patent 5,487,083) and further in view of Copley (US Patent 5,367,539).

Regarding claim 6, the modified McNair et al. fail to disclose the frequency range is subdivided into a plurality of channels of substantially identical channel width.

Copley discloses the frequency range is subdivided into a plurality of channels of substantially identical channel width (see col.9 lines 61-62). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified McNair with the above teaching of Copley in order to provide the placement of power spectra that is the same for all channels is accomplished.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over McNair et al. (US Patent 5,595,342) in view of Nakajima et al. (US Patent 5,487,083), in view of

Copley (US Patent 5,367,539) and further in view of Burdick et al. (US Patent 6,424,820).

Regarding claim 7, the modified McNair et al. fail to disclose the channel width is about 50KHZ.

Burdick et al. disclose the channel width is about 50KHZ (see col.13 lines 61-62). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified McNair et al with the above teaching of Burdick in order to provide wide channel width for higher signal fidelity.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over McNair et al. (US Patent 5,595,342) in view of Nakajima et al. (US Patent 5,487,083) and further in view of Japan. (JP 403106110A).

Regarding claim 9, the modified McNair et al. fail to disclose channel being scanned at a step interval of about 10KHZ.

Japan discloses channel being scanned at a step interval of 10KHZ (see solution paragraph). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified McNair with the above teaching of Japan in order to provide a scanning speed variable included in a microcomputer.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jou (US Pub. 2004/0252724) describes Configuraton of overhead channels in a mixed bandwidth system.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed Tu Nguyen whose telephone number is 571-272-7883. The examiner can normally be reached on Monday through Friday from 8:30AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MAUNG NAY A, can be reached at 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

TN

April 20, 2005

E.O.

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PATENT EXAMINER/TELECOMM.